



Louisville Metro Air Pollution Control District
701 West Ormsby Avenue, Suite 303
Louisville, Kentucky 40203-3137



January 23, 2020

Federally Enforceable District Origin Operating Permit Statement of Basis

Source: United Parcel Service, Inc
911 Grade Lane
Louisville, KY 40213

Owner: United Parcel Service, Inc
911 Grade Lane
Louisville, KY 40213

Application Documents: See Table 8 in Section I
Public Comment Date: 19 December 2019
Permitting Engineer: Shannon Hosey Permit Number: O-0564-20-F
Plant ID: 0564 SIC: 4215 NAICS: 49211

Introduction:

This permit will be issued pursuant to District Regulation 2.17- *Federally Enforceable District Origin Operating Permits*. Its purpose is to limit the plant wide potential emission rates from this source to below major source threshold levels and to provide methods of determining continued compliance with all applicable requirements.

This permit action reclassifies company from a Title V to a FEDOOP for their renewal. This action also incorporates two Jet-A storage tanks, one parts washer, and recategorizing equipment to IA status.

Jefferson County is classified as an attainment area for lead (Pb), nitrogen dioxide (NO₂), carbon monoxide (CO), particulate matter less than 10 microns (PM₁₀), and unclassifiable for particulate matter less than 2.5 microns (PM_{2.5}). The county is a nonattainment area for Ozone (O₃). This facility is located in the portion of the country that is an attainment/a nonattainment area for sulfur dioxide (SO₂)

Permit Application Type:

- | | | |
|---|--|--|
| <input type="checkbox"/> Initial issuance | <input type="checkbox"/> Permit Revision | <input checked="" type="checkbox"/> Permit renewal |
| | <input type="checkbox"/> Administrative | |
| | <input type="checkbox"/> Minor | |
| | <input type="checkbox"/> Significant | |

Compliance Summary

- | | |
|---|---|
| <input checked="" type="checkbox"/> Compliance certification signed | <input type="checkbox"/> Compliance schedule included |
| <input type="checkbox"/> Source is out of compliance | <input checked="" type="checkbox"/> Source is operating in compliance |

I. Source Information

1. **Product Description:** United Parcel Service, Inc ships packages worldwide.
2. **Process Description:** United Parcel Service, Inc receives, sorts, and distributes packages around the world.
3. **Site Determination:** There are no other facilities that are contiguous or adjacent to this facility
4. **Emission Unit Summary:**

Emission Unit	Equipment Description
U1	Hangar parts repair booth, paint spray booth, SDF fugitive, and bead blaster (IA)
U3	Ground Support Equipment (GSE) paint booth
U4	Fuel farm which includes Jet-A tanks and dispensing, bio-additive and diesel tank
U5	Fuel Dispensing (FD) which includes gasoline and diesel tanks and gasoline and diesel dispensing
U9	Wheel and Brake Shop (WSB) which includes bead blasters, grinder, shot blast, and parts washers
U10	Fire Pumps and Existing Emergency Generators
IA2	New Emergency Generators
IA3	Parts Washers

5. **Fugitive Sources:** The fugitive sources identified by the source are uncontrolled portions of the facility.
6. **Permit Revisions:**

Revision No.	Permit No.	Issue Date	Public Notice Date	Change Type	Description
Initial	146-97-TV	10/03/00	06/25/00	Initial	Initial Permit Issuance
R1	146-97-TV (R1)	06/26/13	02/07/13	Renewal	Renewal; incorporate STAR TAC requirements, construction permits: 78-04-C, 111-08-C, 107-08-C, 108-08-C, 109-08-C, 110-08-C, 112-08-C, 318-08-C, 435-05-C,

Revision No.	Permit No.	Issue Date	Public Notice Date	Change Type	Description
					123-02-C, 35442-12-C, and 35811-12-C
NA	O-0564-20-F	01/23/20	12/19/19	Renewal	Renewal; reclassifying to a FEDOOP; incorporating two Jet-A storage tanks and one parts washer that were determined insignificant activities

7. Permit Renewal-Related Documents

Document Number	Date Received	Description
00075470	02/25/2016	AP-100A RO Change
00089787	12/28/2017	Title V Renewal Application
00092198	5/25/2018	AP-100A Reclassifying to FEDOOP and Supplemental Information
98642	3/22/2019	Facility comments regarding informal review of draft permit
22845	6/6/2019	Potential emissions from SDF
116675	9/13/2019	BACT analysis
121871	10/07/2019	Additional Information for BACT

8. Emission Summary:

Pollutant	District Calculated Actual Emissions (ton/yr) 2017 Data	Pollutant that triggered Major Source Status (based on PTE)
CO	4.92	No
NO _x	11.72	Yes
SO ₂	2.32	No
PM ₁₀	1.29	No
VOC	28.85	No
Total HAPs	1.09	No
Single HAP	0.36	No

9. Applicable Requirements

- | | | |
|---|---|---|
| <input checked="" type="checkbox"/> 40 CFR 60 | <input checked="" type="checkbox"/> SIP | <input checked="" type="checkbox"/> 40 CFR 63 |
| <input type="checkbox"/> 40 CFR 61 | <input checked="" type="checkbox"/> District Origin | <input type="checkbox"/> Other |

10. Referenced MACT Federal Regulations:

- | | |
|--------------------------|--|
| 40 CFR 63 Subpart ZZZZ | National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) |
| 40 CFR 63 Subpart CCCCCC | National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities |
| 40 CFR 63 Subpart HHHHHH | National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources |

11. Referenced non-MACT Federal Regulations:

- | | |
|------------------------|---|
| 40 CFR 60 Subpart Kb | Standards of Performance for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984 |
| 40 CFR 60 Subpart IIII | Standards of Performance for Stationary Compression Ignition Internal Combustion Engines |

12. Non-Applicable Regulations:¹

- | | |
|----------------------|---|
| 40 CFR 63 Subpart GG | National Emission Standards for Aerospace Manufacturing and Rework Facilities |
|----------------------|---|

II. Regulatory Analysis

- Acid Rain Requirements:** United Parcel Service, Inc is not subject to the Acid Rain Program.

¹ This subpart does not apply to the rework of aircraft or aircraft components if the holder of the Federal Aviation Administration (FAA) design approval, or the holder's licensee, is not actively manufacturing the aircraft or aircraft components.

2. **Stratospheric Ozone Protection Requirements:** Title VI of the CAAA regulates ozone depleting substances and requires a phase-out of their use. This rule applies to any facility that manufactures, sells, distributes, or otherwise uses any of the listed chemicals. United Parcel Service, Inc does not manufacture, sell, or distribute any of the listed chemicals. The source's use of listed chemicals is that in fire extinguishers, chillers, air conditioners and other HVAC equipment.
3. **Prevention of Accidental Releases 112(r):** United Parcel Service, Inc does not manufacture, process, use, store, or otherwise handle one or more of the regulated substances listed in 40 CFR Part 68, Subpart F, and District Regulation 5.15, *Chemical Accident Prevention Provisions*, in a quantity in excess of the corresponding specified threshold amount.
4. **Basis of Regulation Applicability**

- a. **Plantwide**

United Parcel Service, Inc is a potential major source for the pollutant NO_x. Regulation 2.17 – *Federally Enforceable District Origin Operating Permits* establishes requirements to limit the plant wide potential emission rates to below major source threshold levels and to provide methods of determining continued compliance with all applicable requirements.

Regulations 5.00 5.20, 5.21, and 5.23 (STAR Program) establishes requirements for environmental acceptability of toxic air contaminants (TACs) and the requirement to comply with all applicable emission standards.

Regulation 2.17, section 5.2, requires monitoring and record keeping to assure ongoing compliance with the terms and conditions of the permit. The owner or operator shall maintain all the required records for a minimum of 5 years and make the records readily available to the district upon request.

Regulation 2.17, section 7.2, requires stationary sources for which a FEDOOP is issued to submit an Annual Compliance Certification by April 15, of the following calendar year. In addition, as required by Regulation 2.17, section 5.2, the source shall submit Semi-Annual Compliance Reports to show compliance with the permit. Compliance reports and compliance certifications shall be signed by a responsible official and shall include a certification statement per Regulation 2.17, section 3.5.

In June of 2017, the source submitted Form APG-D to decommission Stage II gasoline dispensing controls. Therefore, District Regulation 6.40 was removed from the permit.

b. **Emission Unit U1 – Hangar**i. **Equipment:**

EP	Install Date	Applicable Regulation	Basis for Applicability
E1: Hangar Composite Parts Repair Booth Clean Room Configuration	1990	STAR, 7.08, 7.25	Regulation 7.08 establishes the requirements for PM emissions from new processes that commence construction after September 1, 1976. Regulation 7.25 establishes VOC standards for affected facilities constructed after June 13, 1979.
E2: Hangar Paint Spray Booth	2002	STAR, 7.08, 7.59, 40 CFR 63 Subpart HHHHH	Regulation 7.59 applies to new miscellaneous metal parts and products surface coating operations commenced on or after May 20, 1981. 40 CFR 63 Subpart HHHHHH establishes national emission standards for paint stripping, autobody refinishing operations and spray applications that contain target HAPs
SDF ²	NA	STAR, 7.25 ³	Regulations 5.00 5.20, 5.21, and 5.23 (STAR Program) establishes requirements for environmental acceptability of toxic air contaminants (TACs)
IA1: Hangar Bead Blaster	1988	7.08	Regulation 7.08 establishes the requirements for PM emissions from new processes that commence construction after September 1, 1976.

ii. **Standards/Operating Limits**1) **HAP**

40 CFR 63.11169 establishes national emission standards for paint stripping, autobody refinishing operations and spray applications of coatings containing target HAPs.

2) **Opacity**

Regulation 7.08, section 3.1.1 establishes an opacity standard of less than 20%.

2 Pursuant to section 5.1.1 of Regulation 7.59 - *Standard of Performance for New Miscellaneous Metal Parts and Product Surface Coating Operations*, this emission point, SDF, is exempted from Regulation 7.59.

3 The facility submitted a BACT analysis on September 13, 2019 and October 7, 2019, and there are no feasible controls besides best management and work practices to reduce potential fugitive VOC emissions from SDF Fugitive.

3) **PM/PM₁₀**

In accordance with Regulation 7.08, Table 1, PM standards are determined by the following equations:

$$E = 3.59(P)^{0.62} \quad \text{if } P \leq 30 \text{ tons/hr}$$

4) **VOC**

- (a) Regulation 7.25, section 2.1 and 3.1 requires that the source shall not equal or exceed 5 tons during any calendar year, unless a BACT is submitted and approved by the District.
- (b) Regulation 7.59, section 5.2 requires that the source shall not allow or cause the total VOC emissions to exceed 5 tons during any 12-month rolling period.

c. **Emission Unit U3 – (GSE) Ground Support Equipment**i. **Equipment:**

EP	Install Date	Applicable Regulation	Basis for Applicability
E3: GSE Paint Booth	1988	STAR, 6.44, 7.08, 40 CFR 63 Subpart HHHHH	Regulation 6.44 applies to existing facilities making spot repairs, panel repairs, refinishing of parts and /or the entire motor vehicle prior to September 1995. Regulation 7.08 establishes the requirements for PM emissions from new processes that commence construction after September 1, 1976. 40 CFR 63 Subpart HHHHHH establishes national emission standards for paint stripping, autobody refinishing operations and spray applications that contain target HAPs.

ii. **Standards/Operating Limits**1) **HAP**

40 CFR 63.11169 establishes national emission standards for paint stripping, autobody refinishing operations and spray applications of coatings containing target HAPs.

2) **Opacity**

Regulation 7.08, section 3.1.1 establishes an opacity standard of less than 20%.

3) **PM/PM₁₀**

In accordance with Regulation 7.08, Table 1, PM standards are determined by the following equations:

$$E = 3.59(P)^{0.62} \quad \text{if } P \leq 30 \text{ tons/hr}$$

4) **VOC**

Regulation 6.44, section 4.1 requires that no coating shall be used with a VOC content, as applied, in excess of the following limits during a calendar month average period:

Coating	VOC lb/gal	VOC kg/l
Pretreatment wash primer	6.5	0.78
Precoat	5.5	0.66
Primer/primer surfacer	4.8	0.58
Primer sealer	4.6	0.55
Topcoat	5.2	0.62
Metallic/iridescent topcoat	5.2	0.62
Extreme performance	6.2	0.74

d. **Emission Unit U4 – Fuel Farm**i. **Equipment:**

EP	Install Date	Applicable Regulation	Basis for Applicability
E4: Jet-A Tank, 512,000 gallons	1985	STAR, 7.12, 40 CFR 60 Subpart Kb	Regulation 7.12 applies to storage tanks with a capacity greater than 250 gallons constructed after April 19, 1972
E5: Jet-A Tank, 213,000 gallons	1983	STAR, 7.12, 40 CFR 60 Subpart Kb	
E6: Jet-A Recovery Tank, 2,800 gallons (IA)	1994	7.12	
E7: Jet-A Dispensing, 24,713 gallons/hr (IA)	1983	7.12	40 CFR 60 Subpart Kb applies to each storage vessel with a capacity greater than or equal to 75 cubic meters that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or
E8: Jet-A Tank, 1,000,000 gallons	2002	STAR, 7.12, 40 CFR 60 Subpart Kb	
E9: Jet-A Tank, 1,000,000 gallons	2002	STAR, 7.12, 40 CFR 60 Subpart Kb	
E10: Jet-A Tank, 2,266,000	2017	STAR, 7.12, 40 CFR	

EP	Install Date	Applicable Regulation	Basis for Applicability
gallons		60 Subpart Kb	modification is commenced after July 23, 1984.
E11: Jet-A Tank, 2,266,000 gallons	2017	STAR, 7.12, 40 CFR 60 Subpart Kb	
E12: Bio-additive for diesel, 5000 gallons (IA)	2002	7.12	
E13: Diesel for DB/Fuel Farm North, 30,000 gallons (IA)	2002	7.12	

ii. **Standards/Operating Limits**

1) **VOC**

Regulation 7.12 establish requirements for storage vessels greater than 250 gallons for volatile organic compounds. Regulation 40 CFR 60 Subpart Kb establish requirements for storage vessels greater than 75 cubic meters. There are no applicable emission or equipment standards if the vapor pressure as stored is less than 1.5 psia.⁴

e. **Emission Unit U5 – Fuel Dispensing (FD)**

i. **Equipment:**

EP	Install Date	Applicable Regulation	Basis for Applicability
E14: WPF Gas AST, 30,000 gallons	1993	STAR, 7.15, 40 CFR 63 Subpart CCCCCC	Regulation 7.12 applies to storage tanks with a capacity greater than 250 gallons constructed after April 19, 1972.
E15: Shuttle Diesel Tank, 12,000 gallons (IA)	1993	7.12	
E16: Diesel Tank Building 9, 12,000 gallons (IA)	1993	7.12	Regulation 7.15 applies to the transfer of VOC from transport tanks into storage tanks constructed after June 13, 1979.
E17: Diesel Tank Building 9, 20,000 gallons (IA)	1997	7.12	
E18: Gasoline Tank, 12,000 gallons	1993	STAR, 7.15, 40 CFR 63 Subpart CCCCCC	40 CFR 63 Subpart CCCCCC establishes national emission limitations and management practices for hazardous air pollutants (HAP) emitted from the loading of gasoline storage
E19: Fuel Dispensing Gas	1993	STAR, 40 CFR 63 Subpart CCCCCC	
E20: Fuel Dispensing	1993	STAR	

⁴ Since the vapor pressure as stored is less than 1.5 psia for the storage tanks, 40 CFR 60 Subpart Kb and Regulation 7.12 have no applicable standards.

EP	Install Date	Applicable Regulation	Basis for Applicability
Diesel			tanks at gasoline dispensing facilities (GDF).

ii. **Standards/Operating Limits**

1) **HAP**

40 CFR 63 Subpart CCCCCC requires that good safety and air pollution control practices be used for Emission Points E14, E18, and E198 as well as not allowing gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Submerged filling must be used. A vapor balance system must be installed and operated on Emission Points E18 and E19.

2) **VOC**

(a) Regulation 7.15 establishes work practice standards for the gasoline storage tanks for Emission Points E14 and E18.

(b) Regulation 7.12, section 3.3 requires Emission Points E15, E16, and E17 be submerged fill if the materials have an as stored vapor pressure of 1.5 psia or greater.

f. **Emission Unit U9 – Wheel and Brake Shop (WSB)**

i. **Equipment:**

EP	Install Date	Applicable Regulation	Basis for Applicability
E21: IDS Bead Blaster with Bag Filter, Blast it All Model 6048-RPJ2-3 (IA)	1988	7.08	Regulation 7.08 establishes the requirements for PM emissions from new processes that commence construction after September 1, 1976.
E22: Grinder, Blanchard Model UNK (IA)	1988	7.08	
E23: Bead Blaster with Bag Filter, Blast it All (IA)	1988	7.08	
E24: Shot Blaster, LS Industries (IA)	1988	7.08	
E25: Zyglo NDT, Zyglo Model ZL-67 (IA)	1988	7.25	Regulation 7.25 establishes VOC standards for affected facilities constructed after June 13, 1979.
E26: Proseco Wheel Wash	2013	6.18	

EP	Install Date	Applicable Regulation	Basis for Applicability
E27: Ramco Parts Washer	2013		Regulation 6.18 applies to cold cleaners.
E28: Crystal Clean Parts Washer	2013		
E29: Better Engineering Parts Washer F4000 (MiraChem/Cee-bee)	2017		
E30: Better Engineering Parts Washer G2000 (Cee-bee)	2013		
E31: Better Engineering Parts Washer F6000 (Cee-Bee)	2013		

Note: The MART washer was replaced with EP E29.

ii. **Standards/Operating Limits**

1) **Opacity**

Regulation 7.08, section 3.1.1 establishes an opacity standard of less than 20%.

2) **PM/PM₁₀**

In accordance with Regulation 7.08, Table 1, PM standards are determined by the following equations:

$$E = 3.59(P)^{0.62} \quad \text{if } P \leq 30 \text{ tons/hr}$$

3) **VOC**

(a) Per Regulation 7.25, Emission Point E45 are limited to VOC emissions of 5.0 tons per year.

(b) Per Regulation 6.18, the owner or operator shall install, maintain, observe specific operating requirements, and shall not operate a cold cleaner using a solvent with a vapor pressure that exceeds 1.0 mm Hg (0.019 psi) measured at 20°C (68°F).

g. **Emission Unit U10 – Fire Pumps and Existing Emergency Generators**

i. **Equipment:**

EP	Install Date	Applicable Regulation	Basis for Applicability
E32: Fire Pump 1, Cummins Model NT-855-F3, diesel, 300 hp (U1 Hanger) (IA)	1989		

EP	Install Date	Applicable Regulation	Basis for Applicability
E33: Fire Pump 2, Cummins Model NT-855-F3, diesel, 300 hp (U1 Hanger) (IA)	1989	40 CFR 63 Subpart ZZZZ	40 CFR 63 Subpart ZZZZ applies to stationary RICE at an area source of HAP emissions.
E34: Fire Pump 3, Cummins Model NT-855-F3, diesel, 300 hp (U1 Hanger) (IA)	1989		
E35: Fire Pump 4, Cummins Model NT-855-F3, diesel, 300 hp (U1 Hanger) (IA)	1989		
E36: Fire Pump 5, Cummins Model NT-855-F3, diesel, 300 hp (U1 Hanger) (IA)	1989		
E37: Fire Pump 6, Cummins Model NT-855-F3, diesel, 300 hp (U1 Hanger) (IA)	1989		
E38: Foam Fire Pump, diesel, 118 hp (U1 Hanger) (IA)	1989		
E39: Diesel Emergency Generator, CAT Model A244730000, 2682 hp (U6 Grade Lane GL)	1988	40 CFR 63 Subpart ZZZZ	40 CFR 63 Subpart ZZZZ applies to stationary RICE at an area source of HAP emissions.
E40: Diesel Emergency Generator, CAT Model A244730000, 2682 hp (U6 Grade Lane GL)	1988		
E41: Diesel Emergency Generator, CAT Model A244730000, 2682 hp (U6 Grade Lane GL)	1988		
E42: Diesel Emergency Generator, CAT Model A244730000, 2682 hp (U6 Grade Lane GL)	1988		
E43: Diesel Emergency Generator, CAT Model A266430002, 2447 hp (U6 Grade Lane GL)	1997		
E44: Diesel Fire Pump, Cummins Model NT-855-F3, 300 hp (U6 Grade Lane GL) (IA)	1989		
E45: WP Diesel Emergency Generator, CAT Model 3516, 2682 hp (U7 Worldport WP)	2004		
E46: WP Diesel Emergency Generator, CAT Model 3516, 2682 hp (U7 Worldport WP)	2004		
E47: Worldport Fire Pump, Perkins Model YB70379, 140 hp (U7 Worldport WP) (IA)	2000		
E48: GOC Diesel Emergency Generator, CAT Model 3516, 2876 hp (U8 Global Operations Center GOC)	2005		
E49: Edgewood Guard Shack Diesel Emergency Generator, 54 hp (IA)	1989		
E50: WFF South APFE Entrance Diesel Emergency Generator, 134 hp (IA)	1989		
E51: Main Entrance Natural Gas Emergency Generator, 27 hp (IA)	1989		
E52: Building 9 Natural Gas Emergency Generator 89 hp (IA)	1989		

ii. **Standards/Operating Limits**

1) **HAP**

40 CFR 63 Subpart ZZZZ establishes standards for national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions.

h. **Emission Unit IA2: New Emergency Generators**

i. **Equipment:**

EP	Install Date	Applicable Regulation	Basis for Applicability
E53: Old West Fuel Farm, CAT Model C15, 535 kw (717 hp) (U4 Fuel Farm FF)	2008	40 CFR 63 Subpart ZZZZ and 40 CFR 60 Subpart IIII	40 CFR 63 Subpart ZZZZ applies to stationary RICE at an area source of HAP emissions.
E54: New West Fuel Farm, CAT Model C18, 550 kw (738 hp) (U4 Fuel Farm FF)	2017		40 CFR 60 Subpart IIII applies to facilities with stationary compression ignition internal combustion engines.

ii. **Standards/Operating Limits**

1) **HAP**

- (a) 40 CFR 60 Subpart IIII establishes standards for Applies to stationary CI internal combustion engines that commences construction after July 11, 2005.
- (b) 40 CFR 63 Subpart ZZZZ establishes standards for national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions.

i. **Emission Unit IA3: Parts Washers**

i. **Equipment:**

EP	Applicable Regulation	Basis for Applicability
IA3: 16 Cold Solvent Parts Washers	6.18	Applies to cold cleaners.

ii. **Standards/Operating Limits**

VOC

The parts washers under this unit meet the definition of insignificant activities per Regulation 2.16, section 1.23. However, Regulation 6.18 applies to each cold cleaner that use VOC to remove soluble impurities from metal surfaces. Regulation 6.18 establishes standards for cold cleaner that use VOCs to remove soluble impurities from metal surfaces.

III. Other Requirements

1. **Temporary Sources:** The source did not request to operate any temporary facilities.
2. **Short Term Activities:** The source did not report any short term activities.
3. **Emissions Trading:** N/A
4. **Alternative Operating Scenarios:** The source did not request any alternative operating scenarios.
5. **Compliance History since Last Operating Permit Issuance:** NA
6. **Calculation Methodology or Other Approved Method:**

Generally, emissions are calculated by multiplying the throughput (ton, MMCF, gallons, etc) or hours of operation of the equipment by the appropriate emission factor and accounting for any control devices unless otherwise approved in writing by the District.

Table 1, Unit U1 and U3: Hangar and Ground Support Equipment (GSE)

EP	Equipment	Emission Factor
E1	Hangar Composite Parts Repair Booth	UPS database lists all materials used in a given area, the chemical constituents of the material, including the HAP %, the material density, and a conversion factor when necessary.
E2	Clean Room Configuration	
E3	Hangar Paint Spray Booth	
E3	GSE Paint Booth	Emissions are calculated from facility purchase and waste records
SDF	Miscellaneous Non-Point Sources, Aircraft Maintenance	
IA1	Hangar Bead Blaster (IA)	AP-42 Chapter 13.2.6.1

Table 2, Unit U4: Fuel Farm

EP	Equipment	Emission Factor
E4	Jet-A Tank, 512,000 gallons	AP-42 Chapter 7.1
E5	Jet-A Tank, 213,000 gallons	AP-42 Chapter 7.1

EP	Equipment	Emission Factor
E6	Jet-A Recovery Tank, 3,000 gallons (IA)	AP-42 Chapter 7.1
E7	Jet-A Dispensing, 24,713 gallons/hr	AP-42, Table 5.2-5 for dispensing: 0.016 lb/1000 gal = 0.000016 lb/gal HAP emissions for Storage and Dispensing are calculated by using Raoult's Law to determine the vapor weight fraction from the constituent partial pressure, system pressure and constituent liquid mole fraction
E8	Jet-A Tank, 1,000,000 gallons	AP-42 Chapter 7.1
E9	Jet-A Tank, 1,000,000 gallons	AP-42 Chapter 7.1
E10	Jet-A Tank, 2,266,000 gallons	AP-42 Chapter 7.1
E11	Jet-A Tank, 2,266,000 gallons	AP-42 Chapter 7.1
E12	Bio-additive for diesel, 5000 gallons (IA)	AP-42 Chapter 7.1
E13	Diesel for DB/Fuel Farm North, 30,000 gallons	AP-42 Chapter 7.1

Table 3, Unit U5: Fuel Dispensing (FD)

EP	Equipment	Emission Factor
E14	WPF Gas AST, 30,000 gallons	AP-42 Chapter 7.1
E15	Shuttle Diesel Tank, 12,000 gallons (IA)	AP-42 Chapter 7.1
E16	Diesel Tank Building 9, 12,000 gallons (IA)	AP-42 Chapter 7.1
E17	Diesel Tank Building 9, 120,000 gallons (IA)	AP-42 Chapter 7.1
E18	Gasoline Tank, 12,000 gallons	AP-42 Chapter 7.1
E19	Fuel Dispensing Gas	AP-42, Table 5.2-7 for dispensing into motor vehicles: 1.8 lb VOC/1000 gal = 0.0018 lb VOC/gal HAP emissions for Storage and Dispensing are calculated by using Raoult's Law to determine the vapor weight fraction from the constituent partial pressure, system pressure and constituent liquid mole fraction
E20	Fuel Dispensing Diesel	AP-42, Table 5.2-5 for dispensing: 0.03 lb/1000 gal = 0.00003 lb/gal

Table 4, Unit U9: Wheel and Brake Shop (WBS)

EP	Equipment	Emission Factor
E21	IDS Bead Blaster with Bag Filter, Blast it All Model 6048-RPJ2-3 (IA)	AP-42, Table AP-42-13.2.6-1 PM = 27 lb/1000 lb sand PM ₁₀ = 13 lb/1000 lb sand PM _{2.5} = 1.3 lb/1000 lb sand
E22	Grinder, Blanchard Model UNK (IA)	7.7 lb PM/ton of metal processed = 1.7 lb/ton for cleaning (EPA) + 6.0 lb/ton for handling (WebFIRE) = 7.7 lb/ton
E23	Bead Blaster with Bag Filter, Blast it All (IA)	AP-42, Table AP-42-13.2.6-1
E24	Shot Blaster, LS Industries (IA)	AP-42, Table AP-42-13.2.6-1

EP	Equipment	Emission Factor
E25	Zyglo NDT, Zyglo Model ZL-67 (IA)	Zyglo Penetrant is ZL-67, density = 8.26 lb/gal; assume 100% VOC
E26	Proseco Wheel Wash	Mass Balance
E27	Ramco Parts Washer	Mass Balance
E28	Crystal Clean Parts Washer	Mass Balance
E29	Better Engineering Parts Washer F4000 (MiraChem/Cee-bee)	Mass Balance
E30	Better Engineering Parts Washer G2000 (Cee-bee)	Mass Balance
E31	Better Engineering Parts Washer F6000 (Cee-Bee)	Mass Balance

Table 5, Unit U10: Fire Pumps and Existing Emergency Generators

EP	Equipment	Emission Factor
E32	Fire Pump 1, Cummins Model NT-855-F3, 300 hp (U1 Hanger) (IA)	AP-42, Table 3.3-1 and 2
E33	Fire Pump 2, Cummins Model NT-855-F3, 300 hp (U1 Hanger) (IA)	AP-42, Table 3.3-1 and 2
E34	Fire Pump 3, Cummins Model NT-855-F3, 300 hp (U1 Hanger) (IA)	AP-42, Table 3.3-1 and 2
E35	Fire Pump 4, Cummins Model NT-855-F3, 300 hp (U1 Hanger) (IA)	AP-42, Table 3.3-1 and 2
E36	Fire Pump 5, Cummins Model NT-855-F3, 300 hp (U1 Hanger) (IA)	AP-42, Table 3.3-1 and 2
E37	Fire Pump 6, Cummins Model NT-855-F3, 300 hp (U1 Hanger) (IA)	AP-42, Table 3.3-1 and 2
E38	Foam Fire Pump, 118 hp (U1 Hanger) (IA)	AP-42, Table 3.3-1 and 2
E39	Diesel Emergency Generator, CAT 2682 hp (U6 Grade Lane GL)	AP-42, Table 3.4-1 and 3
E40	Diesel Emergency Generator, CAT 2682 hp (U6 Grade Lane GL)	AP-42, Table 3.4-1 and 3
E41	Diesel Emergency Generator, CAT 2682 hp (U6 Grade Lane GL)	AP-42, Table 3.4-1 and 3
E42	Diesel Emergency Generator, CAT 2682 hp (U6 Grade Lane GL)	AP-42, Table 3.4-1 and 3
E43	Diesel Emergency Generator, CAT 2447 hp (U6 Grade Lane GL)	AP-42, Table 3.4-1 and 3
E44	Diesel Fire Pump, Cummins 300 hp (U6 Grade Lane GL) (IA)	AP-42, Table 3.3-1 and 2
E45	WP Diesel Emergency Generator, CAT 2682 hp (U7 Worldport WP)	AP-42, Table 3.4-1 and 3
E46	WP Diesel Emergency Generator, CAT 2682 hp (U7 Worldport WP)	AP-42, Table 3.4-1 and 3
E47	Worldport Fire Pump, Perkins 140 hp (U7 Worldport WP) (IA)	AP-42, Table 3.3-1 and 2
E48	GOC Diesel Emergency Generator, CAT 2876 hp (U8 Global Operations Center GOC)	AP-42, Table 3.4-1 and 3
E49	Edgewood Guard Shack Diesel Emergency Generator, 54 hp (IA)	AP-42, Table 3.3-1 and 2
E50	WFF South APFE Entrance Diesel Emergency Generator, 134 hp (IA)	AP-42, Table 3.3-1 and 2
E51	Main Entrance Natural Gas Emergency Generator, 27 hp (IA)	AP-42, Table 3.3-1 and 2
E52	Building 9 Entrance Natural Gas Emergency Generator, 90 hp (IA)	AP-42, Table 3.3-1 and 2

Table 6, Unit IA2: New Emergency Generators

EP	Equipment	Emission Factor
E53	Old West Fuel Farm Emergency Generator, CAT Model C15, 535 kw (717 hp) (U4 Fuel Farm FF)	AP-42, Table 3.4-1 and 3
E54	New West Fuel Farm Emergency Generator, CAT C18 Model 550, 550 kw (738 hp) (U4 Fuel Farm FF)	AP-42, Table 3.3-1 and 2

Table 7 Unit IA3: Parts Washers

EP	Equipment	Emission Factor
IA3	16 Solvent Parts Washers (IA)	Mass Balance

7. Insignificant Activities

Equipment	Qty.	PTE (tpy)	Regulation Basis
Indirect heat exchangers less than 10 MMBtu/hr, natural gas; Size of units < 1MMBtu/hr	148	NO _x = 0.4	Regulation 1.02, Appendix A, section 1.1
Brazing, soldering or welding equipment	11	PM = 0.41	Regulation 1.02, Appendix A, section 3.4
Containers, reservoirs, or tanks used exclusively for storage of lubricating oils or fuel oils with a vapor pressure of less than 10 mm Hg at conditions of 20°C and 760 mm of Hg.	22	VOC = 2	Regulation 1.02, Appendix A, section 3.9.2
Dust or particulate collectors that are located in-doors, vent directly indoors into the work space, collect no more than one ton of material per year.	5	PM = 0.88	Regulation 1.02, Appendix A, section 3.21
Portable diesel or gasoline storage tanks with a maximum capacity of less than 600 gallons.	9	VOC = 2	Regulation 1.02, Appendix A, section 3.23
Storage vessels for VOCs with a maximum capacity of 350 gallons or less.	7	VOC = 2	Regulation 1.02, Appendix A, section 3.24
Diesel or fuel oil storage tanks that are not used for distribution, sale or resale, and that have less than two times the capacity of the vessel in annual turnover of the fluid contained.	18	VOC = 2	Regulation 1.02, Appendix A, section 3.25
Oil-water separators for stormwater wastewater.	16	VOC = 0.0003	Regulation 1.02, section 1.38.1.2.1
Aboveground diesel storage tanks, two 6500 gallons and one 2000 gallons	2	VOC = 0.001	Regulation 1.02, section 1.38.1.2.1

Equipment	Qty.	PTE (tpy)	Regulation Basis
Cooling Tower	1	PM = 1.29	Regulation 1.02, section 1.38.1.2.1
North and South Glycol Farm Storage	1	VOC = 0.0003	
Farm Storage UST	1	VOC = 0.47	
Aircraft de-icing (type I)	NA	VOC = 0.18	
Aircraft anti-icing (type 4)	NA	VOC = 0.16	

- 1) Insignificant activities identified in District Regulation 1.02, Appendix A, may be subject to size or production rate disclosure requirements.
- 2) Insignificant activities identified in District Regulation 1.02, Appendix A shall comply with generally applicable requirements.
- 3) The owner or operator shall annually submit an updated list of insignificant activities that occurred during the preceding year, with the compliance certification due April 15th.
- 4) Emissions from Insignificant Activities shall be reported in conjunction with the reporting of annual emissions of the facility as required by the District.
- 5) The owner or operator may elect to monitor actual throughputs for each of the insignificant activities and calculate actual annual emissions, or use Potential to Emit (PTE) as the annual emissions for each piece of equipment.
- 6) The District has determined that no monitoring, record keeping, or reporting requirements apply to the insignificant activities listed, except for the equipment that has an applicable regulation and permitted under an insignificant activity (IA) unit.